

CASE REPORT

Giant Retroperitoneal Fibrolipoma

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Abstract

Retroperitoneal fibrolipoma is an uncommon tumour. In retroperitoneal space, it can attain an enormous size. A giant retroperitoneal fibrolipoma, weighing 8 kg which was thought to be a malignant lesion pre-operatively, was removed completely from abdomen of a middle aged male patient. The tumour was benign in nature producing pressure symptoms only due to its enormous size. Myxomatous degeneration may occur in retroperitoneal lipoma when its complete removal becomes difficult.

Primary retroperitoneal tumours may originate from the retroperitoneal adipose, muscle, connective, lymphatic & nerve tissue, and also from the urogenital tract. Around 80% of retroperitoneal tumors are malignant and of these, liposarcoma is the most frequent histological type. Lymphomas occupy a great proportion among all retroperitoneal tumours. Although soft tissue sarcomas are more common among adults, retroperitoneal liposarcomas represent only 0.1% to 0.2% of all malignant neoplasms.

Key words : Fibrolipoma

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Introduction

Retroperitoneal fibrolipoma is a benign neoplasm of adult adipose tissue with presence of various percentage of fibrous tissue in retroperitoneal space. The tumour may be a malignant one. A low grade malignant tumour is difficult to differentiate from a benign tumour on investigations alone and needs careful histopathological examination and follow-up.¹ Other tumours of retroperitoneal space are myofibroma, lymphomas, urogenital tract tumours, adrenal tumours and tumours arising from nervous tissues. Sarcomas are the most common retroperitoneal tumours.²

A benign retroperitoneal tumour like fibrolipoma can be easily enucleated but if myxomatous degeneration occurs in a retroperitoneal lipoma, it may be difficult to enucleate for its adherence with surrounding structures.

Careful histopathological examination of the resected specimen and long follow-up of the patient are necessary to predict long term outcome after operation.

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Case report

A 38 year old male patient of Naogaon district presented with a very large abdominal tumour in December, 2008.

Initially, it was a just noticeable lump in his left mid-abdomen which was gradually increasing in size for about 10 years and ultimately attained this enormous size. There was no abdominal pain. He did not complain of dyspepsia or alteration of bowel habit. He never had haematemesis, melaena or haematuria. He complained of ugly looking abdominal swelling and a sense of dragging discomfort on walking. He feels discomfort during work in squatting position.

He has no other complaints except occasional dysuria for about 1 year. Occasionally, he got upper abdominal discomfort in empty stomach.

He used to take drugs like H₂ blockers when upper abdominal discomfort increases in severity.

On examination, his abdomen was found distended by a tumour reaching from the pelvis to within 2 inch of the ensiform cartilage, rather more prominent below than above the umbilicus. It was roughly globular in shape, irregular on the surface, some of the projections being distinctly firmer than the general mass. There was no true

fluctuation, but in some places, a sense of elasticity, like that of a small tense cyst was detected. The whole tumour was dull on percussion, a clear note was present above it, and in the left flank.

His complete blood counts were within normal limit. Urine examination was normal.

Ultrasonography of whole abdomen reported a huge intra-abdominal tumour with uniform tissue architecture. Right kidney & right ureter were pushed above & to the left.

Intravenous urography showed right kidney & ureter pushed up & to the left. No hydronephrosis or hydroureter were detected. X-ray chest & ECG were normal. Serum creatinine level was within normal limit. CT scan or MRI were not done for very poor financial condition of the patient.

A decision was taken in consultation with the anaesthesiologist for laparotomy to remove the tumour. Abdomen was opened the by a right upper para-median incision, which was later extended downwards encircling umbilicus.

A solid, yellowish, retroperitoneal tumour was detected. The front and sides of the tumour were covered by peritoneum.

The tumour was fully exposed by incising peritoneum lateral to descending colon which was then carefully stripped off the tumour. When this had been done, the right ureter and right kidney came into view, being embedded in a deep groove on the inner and posterior aspect of the tumour and were displaced to the left by the tumour. Right ureter and right kidney were carefully separated from the tumour. Left kidney and left ureter were normal.

It was only at that time it was apparent that the tumour started in right upper abdomen and enlarged downwards and to the left, displacing right kidney and right ureter to the left. More swollen portion of the tumour was apparent in left mid- abdomen and gave a false impression about the left mid-abdominal position of the tumour. All other abdominal & pelvic organs were found normal.

The tumour was shelled very easily out of its bed completely. Only two leashes of vessels required ligation. The oozing from the large raw surface left was checked by hot saline compress.

The cut edges of peritoneum were then sutured, bringing the right colon and kidney into approximately normal position, and the abdominal wound closed with a drain at tumour enucleation site in retroperitoneal space. The tumour weighed 8 kg on removal.

Post-operative period was uneventful. There was very little collection from drainage tube which was removed on 4th post-operative day. Skin sutures were removed on 8th post-operative day and the patient was discharged from the hospital on 10th post-operative day.

On histopathological examination, the tumour proved to be a lipoma with small fibrous areas, and a fair amount of connective tissue with no evidence of malignancy.



Figure 1 : The excised specimen on instrument trolley

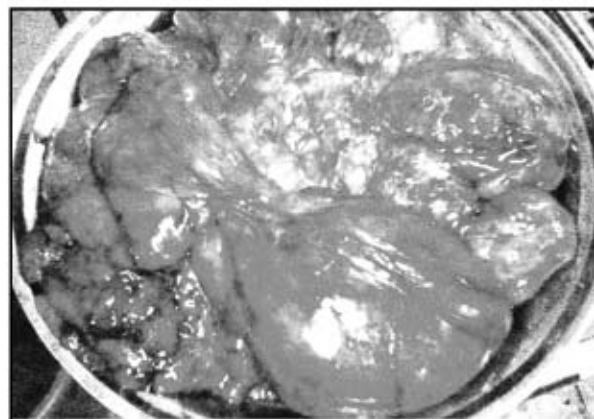


Figure 2: The excised specimen in a bowl

On post-operative follow-up, the patient was alright at 2 weeks, after 2 months and about 1½ years after the operation and is in good health with minimum skin scar. He can perform all normal activities and showed no evidence of recurrence.

Discussion

Lipomas are the most common benign tumors of the adipose tissue among adults.⁶ According to histopathological findings, they are subclassified into conventional lipoma, fibrolipoma, angioliipoma, fusiform cell lipoma, myoliipoma and pleomorphic lipoma.⁶ Retroperitoneal lipomas are extremely rare, slowly growing benign tumors of adipose tissue.

Microscopically, lipomas consist of multivacuolated cells, small eosinophilic cells and univacuolated adipocytes.⁷ Classical lipomas have CT and MRI signal characteristics similar to subcutaneous fat.³

Magnetic resonance imaging will reveal an intense signal on T1-weighted images.⁸ Angiography for lipomas shows the tumors to be hypovascular.⁸ Although retroperitoneal lipomas are relatively more common in adults, they can occur in infants and small children.⁸ The tumour may affect both sexes, but there is a greater predisposition for females.⁴

Differential histopathological diagnosis with liposarcoma may be problematic, especially for tumors with grade 1 malignancy, which are denominated lipoma-like.¹⁰ Pathological examination for mitotic activity, cellular atypia, necrosis, and invasion allows for a definitive diagnosis.

Almost all reported retroperitoneal tumors can be easily and completely resected, without any invasion of adjacent structures. Total excision is the treatment of choice.

Conclusion

Retroperitoneal fibrolipoma is a benign condition but may be malignant. Patients usually present with a huge abdominal swelling slowly growing over long period of time. A benign retroperitoneal

tumour can be easily excised except in places where fatty tissues grow inside muscle fibres and needs care for complete removal. Myxomatous degeneration and malignancy are the situations where complete removal of the tumour may not be possible.

Effects of a benign tumour is usually for its size which may compress neighbouring organs and produce symptoms. In this case, though right kidney and right ureter were pushed above and to the left by the tumour, it did not hamper kidney function.

As the tumour was totally removed, the patient is free from recurrence till now.

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